

**TECHNOLOGY COORDINATION OFFICE**  
**Review and Opinion Regarding the Proposed PBX Software Version Upgrades for**  
**PBX Switches Located at the Health Department, East Administration, the Justice**  
**Center, and the Disaster Recovery Site (6470 Haley Road)**  
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<b>Cost Summary:</b>	<b><u>O&amp;M</u></b>
<b>Shelby County Justice Center (201 Poplar)</b>	<b>\$28,437.37</b>
<b>Health Department (814 Jefferson)</b>	<b>\$14,385.87</b>
<b>East Administration (1075 Mullins Station)</b>	<b>\$8,895.98</b>
<b>Disaster Recovery Bldg (Haley Road)</b>	<b><u>\$11,173.73</u></b>
<b><i>FY 2009 Total</i></b>	<b><u><u>\$62,892.95</u></u></b>

<b>2009 Budget Impact</b>	
<b>Budgeted?</b>	<b>YES</b>

**PROPOSED VENDOR:** AT&T

**OVERVIEW:**

During calendar year 2007, the Shelby County Central Information Technology Department completed the installation / upgrade of four primary telephony (PBX) switches. These switches were upgraded to a common Nortel platform (vendor) with similar capabilities and technical specifications. Those switches are located at the Health Department (814 Jefferson), East Administration (1075 Mullins Station), the Justice Center (201 Poplar) and a Disaster Recovery site (6470 Haley Road). As part of the strategic plan for an integrated telecommunications infrastructure serving the Shelby County government, the software upgrades are required to support to an environment supportive of load-balancing and other measures to improve reliability and quality of service. *Additionally, the operating software on these switches is now due for upgrade in order to avoid lapse of vendor support for the installed PBX operating software.*

**OPINION: RECOMMENDED**

**BUSINESS NEED**

The installations of four primary PBX switches were completed in 2007, bringing them up to a common Nortel CS1000M and CS1000E equipment standard. The four switches are located at the Shelby County Justice Center (201 Poplar), the Health Department (814 Jefferson), East Administration (1075 Mullins Station), and at the Central IT disaster recovery building on Haley Road.

Historically, each switch has been over-trunked in order to cope with an influx of calls during peak periods and emergencies. With IP (Internet Protocol) technology more fully supported (as a result of these software upgrades), Shelby County moves a step closer in its strategic telecommunications infrastructure plan in which each switch can seamlessly transfer in-session calls to another in the event of capacity limitations or processor failure. This software technology will enable the reduction of trunking requirements (available phone lines), and thereby reduce the telecommunication monthly line charges when this technology is fully implemented. This is the result of routing outgoing call requests across the switch network to locate an available line.

The upgrade will also move Shelby County Government closer to being able to recover in a disaster scenario by failing over any 'lost' switches to the Disaster Recovery location at Haley Road. Finally, the software versions on these switches are now several versions out of date. The primary software will no longer be supported by the vendor as of 9/30/2008. *It is more expensive in the long run* to allow the software version on such switches to lapse out of vendor support.

#### **VALUE FOR THE FINANCIAL OUTLAY**

The software is being procured through AT&T, the vendor that installed the switches and is certified in Nortel maintenance, installations, and engineering modifications. The price for this upgrade appears to be competitive considering industry standards for such software upgrades and installations.

#### **DUE DILIGENCE**

Central IT has committed to closely monitoring the new installation to ensure the work is performed as specified.

#### **STRATEGIC FIT**

*These primary switches are the backbone of the Shelby County telecommunications infrastructure and also will play a central role in the long range Shelby County technology plan for a unified telecommunications infrastructure. It is therefore critical that these switches be maintained as close as possible to current software release levels.*

#### **INFORMATION SECURITY CONSIDERATIONS**

No risks foreseen.

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for the Technology Coordination Office